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ART 34 AMDT**C L A I M S

- 5 1. Swirl tube separator for separating solids from a
gas-solid containing feed comprising a tubular housing,
an axial inlet for introducing a gas-solids mixture at
one end of said housing, wherein said axial inlet for
introducing the gas-solids mixture is provided with
10 swirl imparting means, a solids outlet opening at the
opposite end of said housing, and a co-axial positioned
tubular gas outlet conduit placed at an end of said
housing, wherein along the axis of the tubular housing a
vortex extender pin is present.
- 15 2. Swirl tube separator according to claim 1, wherein
the pin is present along at least 20% of the axis of the
tubular housing, said axis running from the inlet
opening of the gas outlet conduit up to the end of the
20 tubular housing opposite said gas outlet conduit.
- 25 3. Swirl tube separator according to claim 2, wherein
the pin is present along at between 30 and 100 % of the
axis of the tubular housing.
- 30 4. Swirl tube separator according to claim 3, wherein
the pin is present along 100 % of the axis of the
tubular housing.
- 35 5. Swirl tube separator according to any one of claims
1-4, wherein the pin extends from the interior of the
gas outlet conduit into the tubular housing and wherein
the pin is fixed within the gas outlet conduit by means
of supporting means, said supporting means are swirl
means which swirl means are positioned such that they
decrease the swirling motion of the gas being discharged
via the gas outlet conduit.

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6. Swirl tube separator according to any one of claims
1-5, wherein the inlet for introducing the gas solids
mixture and the gas outlet conduit are arranged at one
10 end of the tubular housing and the solids outlet opening
is positioned at the opposite end of said housing.

7. Swirl tube separator according to any one of claims
1-5, wherein the inlet for introducing the gas solids
15 mixture is arranged at one end of the tubular housing
and the solids outlet opening and the gas outlet conduit
is positioned at the opposite end of said housing such
that the solids outlet opening is positioned in the
space between the gas outlet conduit and the wall of
20 said housing.

8. Multi separator provided with a plurality parallel
operating swirl tube separators according to any one of
claims 1-7.

9. Process to separate solids from a solids laden
gaseous mixture having a solids content of between 100
and 500 mg/Nm³ to obtain a gaseous stream containing
less than 50 mg solids per Nm³ in a swirl tube separator
according to any one of claims 1-7 or in a multi
separator according to claim 8.